



Please type a plus sign (+) inside this box →

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

		Application Number	09/529,239
		Filing Date	10-27-00
		First Named Inventor	Marie-Pascale Doutriaux
		Group Art Unit	1638
		Examiner Name	David H. Kruse
Total Number of Pages in This Submission		Attorney Docket Number	A33153-PCT-USA

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TECH DEPT

ENCLOSURES (check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input checked="" type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Third Substitute Sequence Listing
Remarks <input checked="" type="checkbox"/> Response to Notice To Comply		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	BakerBotts LLP 30 Rockefeller Plaza New York, NY 10112		
Signature			
Date	1-10-03		
Att Name:	Alicia A. Russo		
PTO Reg:	46,192		

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: 1-10-03

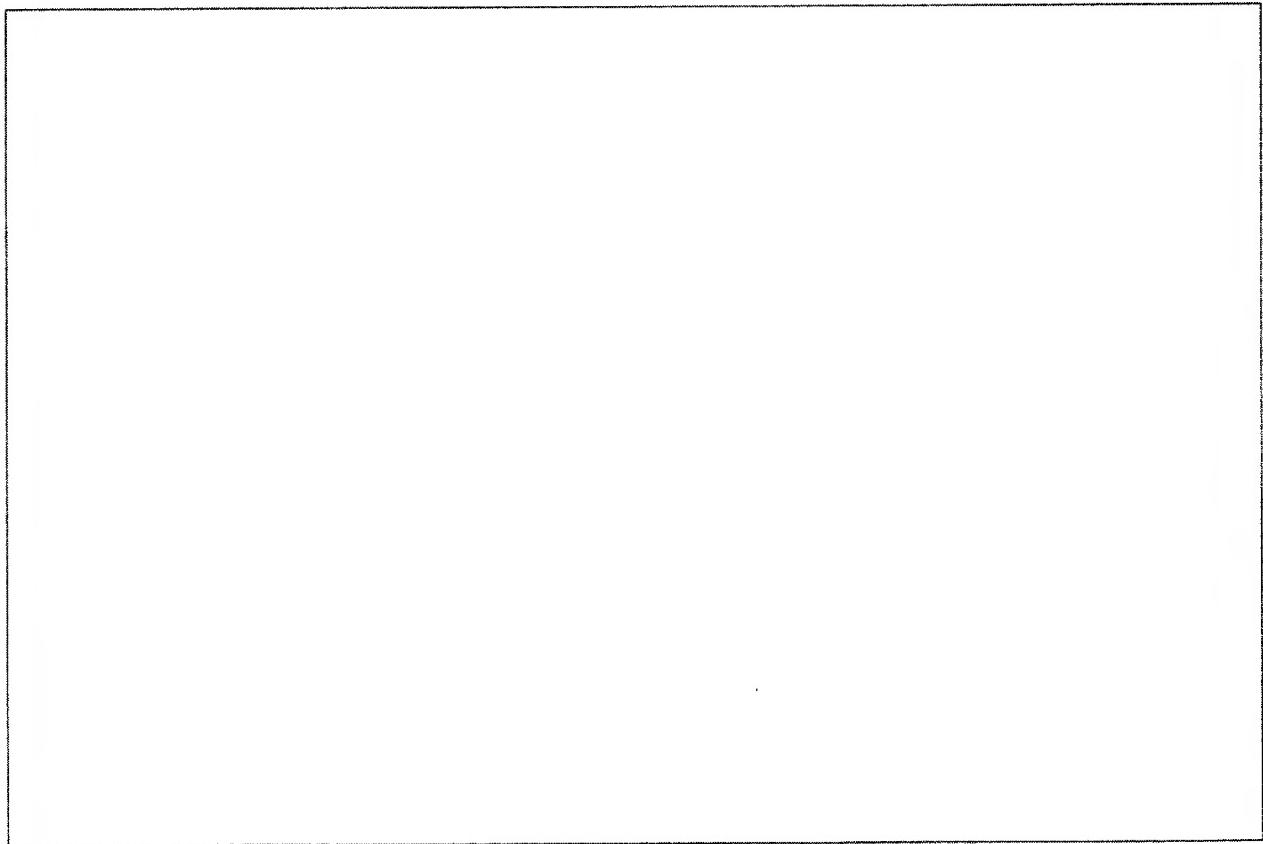
Typed or printed name	Alicia A. Russo		
Signature		Date	1-10-03

BAKER BOTTS LLP

Attorney Docket Number: A33153-PCT-USA

Title: METHODS FOR OBTAINING PLANT VARIETIES

Use Space Below for Additional Information:

A large, empty rectangular box with a thin black border, occupying most of the page below the "Use Space Below for Additional Information:" instruction.

BAKER BOTTS LLP

O I P E
JAN 17 2003

FEET TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 110)

Complete If Known

Application Number	09/529,239
Filing Date	10-27-00
First Named Inventor	Marie-Pascale Doutriaux
Examiner Name	David H. Kruse
Art Unit	1638
Attorney Docket No.	A33153-PCT-USA

TECH CENTER 1600/2003

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METHOD OF PAYMENT (check all that apply)

Check Credit card Money Order Other None

Deposit Account:

02-4377

Baker Botts LLP

The Commissioner is authorized to: (check all that apply)

Charge fee(s) indicated below Credit any overpayments
 Charge any additional fee required under 37CFR 1.16 and 1.17
 Charge fee(s) indicated below, except for the filing fee
 to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity	Small Entity	Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1001 750	2001 375			Utility filing fee	
1002 330	2002 165			Design filing fee	
1003 520	2003 260			Plant filing fee	
1004 750	2004 375			Reissue filing fee	
1005 160	2005 80			Provisional filing fee	
SUBTOTAL (1)		(\$ 0)			

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Independent Claims	Multiple Dependent	Extra Claims below	Fee from below	Fee Paid

Large Entity	Small Entity	Fee Code (\$)	Fee Code (\$)	Fee Description
1202 18	2202 9			Claims in excess of 20
1201 84	2201 42			Independent claims in excess of 3
1203 280	2203 140			Multiple dependent claim, if not paid
1204 84	2204 42			** Reissue independent claims over original patent
1205 18	2205 9			** Reissue claims in excess of 20 and over original patent
SUBTOTAL (2)		(\$ 0)		

**or number previously paid, if greater; For Reissues, see above

3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	110
1252 410	2252 205	Extension for reply within second month	
1253 930	2253 465	Extension for reply within third month	
1254 1,450	2254 725	Extension for reply within fourth month	
1255 1,970	2255 985	Extension for reply within fifth month	
1401 320	2401 160	Notice of Appeal	
1402 320	2402 160	Filing a brief in support of an appeal	
1403 280	2403 140	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,300	2453 650	Petition to revive - unintentional	
1501 1,300	2501 650	Utility issue fee (or reissue)	
1502 470	2502 235	Design issue fee	
1503 630	2503 315	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 750	2809 375	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 750	2810 375	For each additional invention to be examined (37 CFR 1.129(b))	
1801 750	2801 375	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	
Other fee (specify)			

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 110)

SUBMITTED BY

(Complete if applicable)

Name (Print/Type)	Alicia A. Russo	Registration No. (Attorney/Agent)	46,192	Telephone	212-408-2627
Signature	<i>Alicia A. Russo</i>	Date	1-10-03		



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/529,239	10/27/2000	Marie-Pascale Doutriaux	A33153-PCT USA	1839

21003 7590 11/13/2002

BAKER & BOTTS
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

[REDACTED] EXAMINER

KRUSE, DAVID H

ART UNIT	PAPER NUMBER
1638	

DATE MAILED: 11/13/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

BAKER BOTTS L.L.P.

02 NOV 18 AM 11:11

TO



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Docketed

For 12/13/2002 by [Signature]

5/13/03 [Signature]



UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant's Copy

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, DC 20231
www.uspto.gov

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
---------------------------------	-------------	---------------------------------------------------	---------------------



EXAMINER

ART UNIT PAPER

22

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents

The communication filed 26 September 2002 is not fully responsive to the Office communication mailed 21 May 2002 for the reason(s) set forth on the attached Notice To Comply With The Sequence Rules or CRF Diskette Problem Report. Applicant must comply with the requirements of the sequence rules (37 CFR 1.821 - 1.825) before the application can be examined under 35 U.S.C. §§ 131 and 132.

Since the reply appears to be bona fide attempt to comply with the requirements of the sequence rules (37 CFR 1.821 - 1.825), applicant is given a TIME PERIOD of ONE (1) MONTH from the mailing date of this communication within which to correct the deficiency so as to comply with the sequence rules (37 CFR 1.821 - 1.825) in order to avoid abandonment of the application under 37 CFR 1.821(g). EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).

Any inquiry concerning this communication should be directed to Examiner David Kruse, Ph.D., Art Unit 1638, whose telephone number is (703) 306-4539.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0196.

David Kruse Art Unit 1638
6 November 2002

AMY J. NELSON, PH.D.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600

Notice to Comply

Application No.
#529,239
Examiner
David H Kruse

Applicant(s)
DOUTRIAUX ET AL.
Art Unit
1638

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).
- 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
- 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- 6. The paper copy of the "Sequence Listing" is not the same as the computer readable from of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- 7. Other:

Applicant Must Provide:

- An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.
- A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

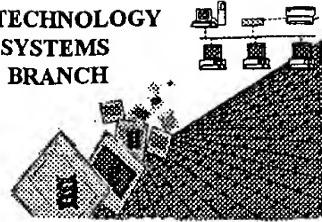
For Rules Interpretation, call (703) 308-4216
For CRF Submission Help, call (703) 308-4212
PatentIn Software Program Support

Technical Assistance.....703-287-0200
To Purchase PatentIn Software.....703-306-2600

PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR REPLY



BIOTECHNOLOGY
SYSTEMS
BRANCH



1638
#21
BD
1-5-02

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/529,239B
Source: 1600
Date Processed by STIC: 10/3/2002

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THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,
2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office,
Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002



1600

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/529,239B

DATE: 10/21/2002
TIME: 18:20:24

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Output Set: N:\CRF4\10212002\I529239B.raw

Does Not Comply
Corrected Diskette Needed

pp 1-2,5-7

1 <110> APPLICANT: Doutriaux, Marie-Pascale
2 Betzner, Andreas
3 Freyssinet, Georges
4 Perez, Pascal
5 <120> TITLE OF INVENTION: METHOD FOR OBTAINING PLANT VARIETIES
6 <130> FILE REFERENCE: A33153-PCT-USA 072667.0128
7 <140> CURRENT APPLICATION NUMBER: US/09/529,239B
8 <141> CURRENT FILING DATE: 2000-10-27
9 <150> PRIOR APPLICATION NUMBER: PCT/EP98/06977
10 <151> PRIOR FILING DATE: 1998-10-09
11 <160> NUMBER OF SEQ ID NOS: 103

RECEIVED

OCT 25 2002

TECH CENTER 1600/2900

ERRORED SEQUENCES

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insert this
mandatory numerical identifier
→ 2207 whenever

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PATENT APPLICATION: US/09/529,239B

DATE: 10/21/2002
TIME: 18:20:24

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/529,239B

DATE: 10/21/2002
TIME: 18:20:24

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525 Glu Ala Val Ile Leu Ser Leu Ser Pro Ala Glu Leu Leu Gly Gln
526           290         295         300
527 Pro Leu Ser Gln Gln Thr Glu Lys Phe Leu Val Ala Met Ala Gly Pro
528           305         310         315         320
529 Thr Ser Asn Val Arg Val Glu Arg Ala Ser Leu Asp Cys Phe Ser Asn
530           325         330         335
531 Gly Asn Ala Val Asp Glu Val Ile Ser Leu Cys Glu Lys Ile Ser Ala
532           340         345         350
533 Gly Asn Leu Glu Asp Asp Lys Glu Met Lys Leu Glu Ala Ala Glu Lys
534           355         360         365
535 Gly Met Ser Cys Leu Thr Val His Thr Ile Met Asn Met Pro His Leu
536           370         375         380
537 Thr Val Gln Ala Leu Ala Leu Thr Phe Cys His Leu Lys Gln Phe Gly
538           385         390         395         400
539 Phe Glu Arg Ile Leu Tyr Gln Gly Ala Ser Phe Arg Ser Leu Ser Ser

```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/529,239B

DATE: 10/21/2002
TIME: 18:20:24

Input Set : N:\Crf4\Refhold\I529239B.raw
Output Set: N:\CRF4\10212002\I529239B.raw

540	405	410	415
541	Asn Thr Glu Met Thr Leu Ser Ala Asn Thr Leu Gln Gln Leu Glu Val		
542	420	425	430
543	Val Lys Asn Asn Ser Asp Gly Ser Gly Ser Gly Ser Leu Phe His Asn		
544	435	440	445
545	Met Asn His Thr Leu Thr Val Tyr Gly Ser Arg Leu Leu Arg His Trp		
546	450	455	460
547	Val Thr His Pro Leu Cys Asp Arg Asn Leu Ile Ser Ala Arg Leu Asp		
548	465	470	475
549	Ala Val Ser Glu Ile Ser Ala Cys Met Gly Ser His Ser Ser Ser Gln		
550	485	490	495
551	Leu Ser Ser Glu Leu Val Glu Glu Gly Ser Glu Arg Ala Ile Val Ser		
552	500	505	510
553	Pro Glu Phe Tyr Leu Val Leu Ser Ser Val Leu Thr Ala Met Ser Arg		
554	515	520	525
555	Ser Ser Asp Ile Gln Arg Gly Ile Thr Arg Ile Phe His Arg Thr Ala		
556	530	535	540
557	Lys Ala Thr Glu Phe Ile Ala Val Met Glu Ala Ile Leu Leu Ala Gly		
558	545	550	555
559	Lys Gln Ile Gln Arg Leu Gly Ile Lys Gln Asp Ser Glu Met Arg Ser		
560	565	570	575
561	Met Gln Ser Ala Thr Val Arg Ser Thr Leu Leu Arg Lys Leu Ile Ser		
562	580	585	590
563	Val Ile Ser Ser Pro Val Val Asp Asn Ala Gly Lys Leu Leu Ser		
564	595	600	605
565	Ala Leu Asn Lys Glu Ala Ala Val Arg Gly Asp Leu Leu Asp Ile Leu		
566	610	615	620
567	Ile Thr Ser Ser Asp Gln Phe Pro Glu Leu Ala Glu Ala Arg Gln Ala		
568	625	630	635
569	640		
570	Val Leu Val Ile Arg Glu Lys Leu Asp Ser Ser Ile Ala Ser Phe Arg		
571	645	650	655
572	Lys Lys Leu Ala Ile Arg Asn Leu Glu Phe Leu Gln Val Ser Gly Ile		
573	660	665	670
574	Thr His Leu Ile Glu Leu Pro Val Asp Ser Lys Val Pro His Asn Trp		
575	675	680	685
576	Val Lys Val Asn Ser Thr Lys Lys Thr Ile Arg Tyr His Pro Pro Glu		
577	690	695	700
578	Ile Val Ala Gly Leu Asp Glu Leu Ala Leu Ala Thr Glu His Leu Ala		
579	705	710	715
580	720		
581	Ile Val Asn Arg Ala Ser Trp Asp Ser Phe Leu Lys Ser Phe Ser Arg		
582	725	730	735
583	Tyr Tyr Thr Asp Phe Lys Ala Ala Val Gln Ala Leu Ala Leu Asp		
584	740	745	750
585	Cys Leu His Ser Leu Ser Thr Leu Ser Arg Asn Lys Asn Tyr Val Arg		
586	755	760	765
587	Pro Glu Phe Val Asp Asp Cys Glu Pro Val Glu Ile Asn Ile Gln Ser		
588	770	775	780
	Gly Arg His Pro Val Leu Glu Thr Ile Leu Gln Asp Asn Phe Val Pro		
	785	790	795
			800

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/529,239B

DATE: 10/21/2002
TIME: 18:20:24

Input Set : N:\Crf4\Refhold\I529239B.raw
Output Set: N:\CRF4\10212002\I529239B.raw

589 Asn Asp Thr Ile Leu His Ala Glu Gly Glu Tyr Cys Gln Ile Ile Thr
 590 805 810 815
 591 Gly Pro Asn Met Gly Gly Lys Ser Cys Tyr Ile Arg Gln Val Ala Leu
 592 820 825 830
 593 Ile Ser Ile Met Ala Gln Val Gly Ser Phe Val Pro Ala Ser Phe Ala
 594 835 840 845
 595 Lys Leu His Val Leu Asp Gly Val Phe Thr Arg Met Gly Ala Ser Asp
 596 850 855 860
 597 Ser Ile Gln His Gly Arg Ser Thr Phe Leu Glu Glu Leu Ser Glu Ala
 598 865 870 875 880
 599 Ser His Ile Ile Arg Thr Cys Ser Ser Arg Ser Leu Val Ile Leu Asp
 600 885 890 895
 601 Glu Leu Gly Arg Gly Thr Ser Thr His Asp Gly Val Ala Ile Ala Tyr
 602 900 905 910
 603 Ala Thr Leu Gln His Leu Leu Ala Glu Lys Arg Cys Leu Val Leu Phe
 604 915 920 925
 605 Val Thr His Tyr Pro Glu Ile Ala Glu Ile Ser Asn Gly Phe Pro Gly
 606 930 935 940
 607 Ser Val Gly Thr Tyr His Val Ser Tyr Leu Thr Leu Gln Lys Asp Lys
 608 945 950 955 960
 609 Gly Ser Tyr Asp His Asp Asp Val Thr Tyr Leu Tyr Lys Leu Val Arg
 610 965 970 975
 611 Gly Leu Cys Ser Arg Ser Phe Gly Phe Lys Val Ala Gln Leu Ala Gln
 612 980 985 990
 613 Ile Pro Pro Ser Cys Ile Arg Arg Ala Ile Ser Met Ala Ala Lys Leu
 614 995 1000 1005
 615 Glu Ala Glu Val Arg Ala Arg Glu Arg Asn Thr Arg Met Gly Glu Pro
 616 1010 1015 1020
 617 Glu Gly His Glu Glu Pro Arg Gly Ala Glu Glu Ser Ile Ser Ala Leu
 618 1025 1030 1035 1040
 619 Gly Asp Leu Phe Ala Asp Leu Lys Phe Ala Leu Ser Glu Glu Asp Pro
 620 1045 1050 1055
 621 Trp Lys Ala Phe Glu Phe Leu Lys His Ala Trp Lys Ile Ala Gly Lys
 622 1060 1065 1070
 623 Ile Arg Leu Lys Pro Thr Cys Ser Phe
 624 1075 1080

685 <210> SEQ ID NO: 26

686 <211> LENGTH: 2188

687 <212> TYPE: DNA

688 <213> ORGANISM: Arabidopsis thaliana ecotype Columbia

689 <223> OTHER INFORMATION: Clone 43

E--> 690 <400> SEQUENCE: 26

691 cccggatgc	agcgccagag	atcgattttg	tctttcttcc	aaaaacccac	ggccggcact	60
692 acgaagggtt	tggttccgg	cgatgctgt	agcggcgaaa	gcggcagcgg	aggaccacga	120
693 tttaatgtga	aggaaggggaa	tgctaaaggc	gacgcttctg	tacgttttgc	tgtttcgaaa	180
694 tctgtcgatg	aggttagagg	aacggatact	ccacccggaga	aggttcccg	tcgtgtcctg	240
695 ccgtctggat	ttaagccggc	tgaatccgccc	ggtgatgttt	cgtccccgtt	ctccaatatt	300
696 atgcataagt	ttgtaaaagt	cgatgatcga	gattgttctg	gagagaggag	ccgagaagat	360
697 gttgttccgc	tgaatgattc	atctctatgt	atgaaggcta	atgatgttat	tcctcaat	420

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/529,239B

DATE: 10/21/2002
TIME: 18:20:24

Input Set : N:\CrF4\Refhold\I529239B.raw
Output Set: N:\CRF4\10212002\I529239B.raw

698	cgttccaata	atggtaaaaac	tcaagaaaaga	aaccatgctt	ttagtttcag	tgggagagct	480
699	gaacttagat	cagttagaaga	tataggagta	gatggcgatg	ttcttggtcc	agaaacacca	540
700	gggatgcgtc	cacgtgcattc	tcgcttgaag	cgagttctgg	aggatgaaat	gacttttaag	600
701	gaggataagg	ttctctgtatt	ggactctaac	aaaaggctga	aatgtctca	ggatccggtt	660
702	tgtggagaga	agaaaagaagt	aaacgaagga	accaaatttg	aatggcttga	gtcttctcga	720
703	atcaggatgt	ccaaatagaag	acgtcctgtat	gatccccctt	acgatagaaa	gaccttacac	780
704	ataccacctg	atgttttcaaa	gaaaatgtct	gcatcacaaa	agaatatttg	gagtgttaag	840
705	agtgaatata	tggacatgt	gctttcttt	aaagtgggaa	aattttatga	gctgtatgag	900
706	ctagatgcgg	aatttaggtca	caaggagctt	gacttggaaaga	tgaccatgag	tggtgtggga	960
707	aaatgcagac	aggttggtat	ctctgaaagt	gggatagatg	aggcagtgc	aaagctatta	1020
708	gctcgtggat	ataaaagtgg	acgaatcgag	cagctagaaa	catctgacca	agcaaaaagcc	1080
709	agaggtgcta	atactataat	tccaaaggaag	ctagttcagg	tattaactcc	atcaacacgca	1140
710	agcggaggaa	acatcgggcc	tgatgccgtc	catcttcttg	ctataaaaaga	gatcaaaaatg	1200
711	gagotacaaa	agtgttcaac	tgtgtatgga	tttgcttttgc	ttgactgtgc	tgccttgagg	1260
712	ttttgggttgc	ggtccatcag	cgtatgtgc	tcatgtgctg	ctcttggagc	gttattgtat	1320
713	caggttctc	caaaggaaagt	gttatatgac	agtaaagggc	tatcaagaga	agcacaaaaag	1380
714	gctctaagga	aataatacgat	gacagggtct	acggcggtac	agttggctcc	agtaccacaa	1440
715	gtaatggggg	atacagatgc	tgctggagtt	agaaatataaa	tagaatctaa	cggataacttt	1500
716	aaaggttctt	ctgaatcatg	gaactgtgt	gttgatggtc	taaatgaatg	tgatgttgcc	1560
717	cttagtgctc	ttggagagct	aattaatcat	ctgtctaggc	taaagctaga	agatgtactt	1620
718	aagcatgggg	atatttttcc	ataccaagtt	tacagggtt	gtctcagaat	tgatggccag	1680
719	acgatggtaa	atcttggat	attnaacaat	agctgtatg	gtgtccttc	agggaccttg	1740
720	tacaaatatac	ttgataactg	tgttagtcca	actggtaagc	gactcttaag	gaattggatc	1800
721	tgccatccac	tcaaagatgt	agaaaagcattc	aataaacggc	ttgatgtatgt	tgaagaattc	1860
722	acggcaaact	cagaaaagtat	gcaaatcaact	ggccagtatc	tccacaaaact	tccagactta	1920
723	gaaagactgc	tcggacgcatt	caagtcttagc	gttcgatcat	cagcctctgt	gttgctgtct	1980
724	cttctgggaa	aaaaagtgt	gaaacacaacga	gttaaagcat	ttgggcaaat	tgtgaaaggg	2040
725	ttcagaagtgc	gaattgtatct	gttggtgct	ctacagaagg	aatcaaatat	gatgagtttg	2100
726	ctttataaaac	tctgttaaact	tccttatatta	gttaggaaaaa	gcgggctaga	gttatttctt	2160
727	tctcaattcg	aagcagccat	agatagcg				2188

729 <210> SEQ ID NO: 27

730 <211> LENGTH: 1385

731 <212> TYPE: DNA

732 <213> ORGANISM: *Arabidopsis thaliana* ecotype Columbia

733 <223> OTHER INFORMATION: Clone 62

E--> 734 <400> SEQUENCE: 27

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/529,239B

DATE: 10/21/2002
TIME: 18:20:24

Input Set : N:\Crf4\Refhold\I529239B.raw
Output Set: N:\CRF4\10212002\I529239B.raw

748	tagaatgcac tgagacagcg tcagttcttc agaatgcaac tcaggattca ctagtaatcc	840
749	ttgacgaact gggcagagga actagtactt tcgatggata cgccattgca tactcggtt	900
750	ttcgtcacct ggttagagaaa gttaaatgtc ggatgcttt tgcaacacat taccaccctc	960
751	tcaccaagga attcgcgtct caccacgtg tcacctcgaa acacatggct tgcgcatca	1020
752	aatcaagatc tgattatcaa ccacgtgggt gtgatcaaga cctagtgttc ttgtaccgtt	1080
753	taaccgaggg agcttgctt gagagctacg gacttcaagt ggcaactatg gctgaaatac	1140
754	caaaccaagt ggttgaardaca gcatcagggt ctgctcaagc catgaagaga tcaattgggg	1200
755	aaaacttcaa gtcaagtggag ctaagatctg agttctcaag tctgcatgaa gactggctca	1260
756	agtcattgggt gggattttct cgagtcgccc acaacaatgc cccattggc gaagatgact	1320
757	acgacacttt gtttgctta tggcatgaga tcaaattcctc ttactgtgtt cccaaataaac	1380
758	ccgggg	1385

1005 <210> SEQ ID NO: 31

1006 <211> LENGTH: 1109

1007 <212> TYPE: PRT

1008 <213> ORGANISM: Arabidopsis thaliana ecotype Columbia

1009 <223> OTHER INFORMATION: Polypeptide MSH6

same

E--> 1010 <400> SEQUENCE: 31

1011	Met Gln Arg Gln Arg Ser Ile Leu Ser Phe Phe Gln Lys Pro Thr Ala	
1012	1 5 10 15	
1013	Ala Thr Thr Lys Gly Leu Val Ser Gly Asp Ala Ala Ser Gly Gly Gly	
1014	20 25 30	
1015	Gly Ser Gly Gly Pro Arg Phe Asn Val Arg Glu Gly Asp Ala Lys Gly	
1016	35 40 45	
1017	Asp Ala Ser Val Arg Phe Ala Val Ser Lys Ser Val Asp Glu Val Arg	
1018	50 55 60	
1019	Gly Thr Asp Thr Pro Pro Glu Lys Val Pro Arg Arg Val Leu Pro Ser	
1020	65 70 75 80	
1021	Gly Phe Lys Pro Ala Glu Ser Ala Gly Asp Ala Ser Ser Leu Phe Ser	
1022	85 90 95	
1023	Asn Ile Met His Lys Phe Val Lys Val Asp Asp Arg Asp Cys Ser Gly	
1024	100 105 110	
1025	Glu Arg Ser Arg Glu Asp Val Val Pro Leu Asn Asp Ser Ser Leu Cys	
1026	115 120 125	
1027	Met Lys Ala Asn Asp Val Ile Pro Gln Phe Arg Ser Asn Asn Gly Lys	
1028	130 135 140	
1029	Thr Gln Glu Arg Asn His Ala Phe Ser Phe Ser Gly Arg Ala Glu Leu	
1030	145 150 155 160	
1031	Arg Ser Val Glu Asp Ile Gly Val Asp Gly Asp Val Pro Gly Pro Glu	
1032	165 170 175	
1033	Thr Pro Gly Met Arg Pro Arg Ala Ser Arg Leu Lys Arg Val Leu Glu	
1034	180 185 190	
1035	Asp Glu Met Thr Phe Lys Glu Asp Lys Val Pro Val Leu Asp Ser Asn	
1036	195 200 205	
1037	Lys Arg Leu Lys Met Leu Gln Asp Pro Val Cys Gly Glu Lys Lys Glu	
1038	210 215 220	
1039	Val Asn Glu Gly Thr Lys Phe Glu Trp Leu Glu Ser Ser Arg Ile Arg	
1040	225 230 235 240	
1041	Asp Ala Asn Arg Arg Pro Asp Asp Pro Leu Tyr Asp Arg Lys Thr	
1042	245 250 255	

Use of n and/or Xaa has been detected in the Sequence Listing.

Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/529,239B

DATE: 10/21/2002
TIME: 18:20:24

Input Set : N:\Crf4\Refhold\I529239B.raw
Output Set: N:\CRF4\10212002\I529239B.raw

1043 Leu His Ile Pro Pro Asp Val Phe Lys Lys Met Ser Ala Ser Gln Lys
 1044 260 265 270
 1045 Gln Tyr Trp Ser Val Lys Ser Glu Tyr Met Asp Ile Val Leu Phe Phe
 1046 275 280 285
 1047 Lys Val Gly Lys Phe Tyr Glu Leu Tyr Glu Leu Asp Ala Glu Leu Gly
 1048 290 295 300
 1049 His Lys Glu Leu Asp Trp Lys Met Thr Met Ser Gly Val Gly Lys Cys
 1050 305 310 315 320
 1051 Arg Gln Val Gly Ile Ser Glu Ser Gly Ile Asp Glu Ala Val Gln Lys
 1052 325 330 335
 1053 Leu Leu Ala Arg Gly Tyr Lys Val Gly Arg Ile Glu Gln Leu Glu Thr
 1054 340 345 350
 1055 Ser Asp Gln Ala Lys Ala Arg Gly Ala Asn Thr Ile Ile Pro Arg Lys
 1056 355 360 365
 1057 Leu Val Gln Val Leu Thr Pro Ser Thr Ala Ser Glu Gly Asn Ile Gly
 1058 370 375 380
 1059 Pro Asp Ala Val His Leu Leu Ala Ile Lys Glu Ile Lys Met Glu Leu
 1060 385 390 395 400
 1061 Gln Lys Cys Ser Thr Val Tyr Gly Phe Ala Phe Val Asp Cys Ala Ala
 1062 405 410 415
 1063 Leu Arg Phe Trp Val Gly Ser Ile Ser Asp Asp Ala Ser Cys Ala Ala
 1064 420 425 430
 1065 Leu Gly Ala Leu Leu Met Gln Val Ser Pro Lys Glu Val Leu Tyr Asp
 1066 435 440 445
 1067 Ser Lys Gly Leu Ser Arg Glu Ala Gln Lys Ala Leu Arg Lys Tyr Thr
 1068 450 455 460
 1069 Leu Thr Gly Ser Thr Ala Val Gln Leu Ala Pro Val Pro Gln Val Met
 1070 465 470 475 480
 1071 Gly Asp Thr Asp Ala Ala Gly Val Arg Asn Ile Ile Glu Ser Asn Gly
 1072 485 490 495
 1073 Tyr Phe Lys Gly Ser Ser Glu Ser Trp Asn Cys Ala Val Asp Gly Leu
 1074 500 505 510
 1075 Asn Glu Cys Asp Val Ala Leu Ser Ala Leu Gly Glu Leu Ile Asn His
 1076 515 520 525
 1077 Leu Ser Arg Leu Lys Leu Glu Asp Val Leu Lys His Gly Asp Ile Phe
 1078 530 535 540
 1079 Pro Tyr Gln Val Tyr Arg Gly Cys Leu Arg Ile Asp Gly Gln Thr Met
 1080 545 550 555 560
 1081 Val Asn Leu Glu Ile Phe Asn Asn Ser Cys Asp Gly Gly Pro Ser Gly
 1082 565 570 575
 1083 Thr Leu Tyr Lys Tyr Leu Asp Asn Cys Val Ser Pro Thr Gly Lys Arg
 1084 580 585 590
 1085 Leu Leu Arg Asn Trp Ile Cys His Pro Leu Lys Asp Val Glu Ser Ile
 1086 595 600 605
 1087 Asn Lys Arg Leu Asp Val Val Glu Glu Phe Thr Ala Asn Ser Glu Ser
 1088 610 615 620
 1089 Met Gln Ile Thr Gly Gln Tyr Leu His Lys Leu Pro Asp Leu Glu Arg
 1090 625 630 635 640
 1091 Leu Leu Gly Arg Ile Lys Ser Ser Val Arg Ser Ser Ala Ser Val Leu

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/529,239B

DATE: 10/21/2002
TIME: 18:20:24

Input Set : N:\Crf4\Refhold\I529239B.raw
Output Set: N:\CRF4\10212002\I529239B.raw

1092	645	650	655
1093	Pro Ala Leu Leu Gly Lys Lys Val Leu Lys Gln Arg Val Lys Ala Phe		
1094	660	665	670
1095	Gly Gln Ile Val Lys Gly Phe Arg Ser Gly Ile Asp Leu Leu Ala		
1096	675	680	685
1097	Leu Gln Lys Glu Ser Asn Met Met Ser Leu Leu Tyr Lys Leu Cys Lys		
1098	690	695	700
1099	Leu Pro Ile Leu Val Gly Lys Ser Gly Leu Glu Leu Phe Leu Ser Gln		
1100	705	710	715
1101	Phe Glu Ala Ala Ile Asp Ser Asp Phe Pro Asn Tyr Gln Asn Gln Asp		
1102	725	730	735
1103	Val Thr Asp Glu Asn Ala Glu Thr Leu Thr Ile Leu Ile Glu Leu Phe		
1104	740	745	750
1105	Ile Glu Arg Ala Thr Gln Trp Ser Glu Val Ile His Thr Ile Ser Cys		
1106	755	760	765
1107	Leu Asp Val Leu Arg Ser Phe Ala Ile Ala Ala Ser Leu Ser Ala Gly		
1108	770	775	780
1109	Ser Met Ala Arg Pro Val Ile Phe Pro Glu Ser Glu Ala Thr Asp Gln		
1110	785	790	795
1111	Asn Gln Lys Thr Lys Gly Pro Ile Leu Lys Ile Gln Gly Leu Trp His		
1112	805	810	815
1113	Pro Phe Ala Val Ala Ala Asp Gly Gln Leu Pro Val Pro Asn Asp Ile		
1114	820	825	830
1115	Leu Leu Gly Glu Ala Arg Arg Ser Ser Gly Ser Ile His Pro Arg Ser		
1116	835	840	845
1117	Leu Leu Leu Thr Gly Pro Asn Met Gly Gly Lys Ser Thr Leu Leu Arg		
1118	850	855	860
1119	Ala Thr Cys Leu Ala Val Ile Phe Ala Gln Leu Gly Cys Tyr Val Pro		
1120	865	870	875
1121	Cys Glu Ser Cys Glu Ile Ser Leu Val Asp Thr Ile Phe Thr Arg Leu		
1122	885	890	895
1123	Gly Ala Ser Asp Arg Ile Met Thr Gly Glu Ser Thr Phe Leu Val Glu		
1124	900	905	910
1125	Cys Thr Glu Thr Ala Ser Val Leu Gln Asn Ala Thr Gln Asp Ser Leu		
1126	915	920	925
1127	Val Ile Leu Asp Glu Leu Gly Arg Gly Thr Ser Thr Phe Asp Gly Tyr		
1128	930	935	940
1129	Ala Ile Ala Tyr Ser Val Phe Arg His Leu Val Glu Lys Val Gln Cys		
1130	945	950	955
1131	Arg Met Leu Phe Ala Thr His Tyr His Pro Leu Thr Lys Glu Phe Ala		
1132	965	970	975
1133	Ser His Pro Arg Val Thr Ser Lys His Met Ala Cys Ala Phe Lys Ser		
1134	980	985	990
1135	Arg Ser Asp Tyr Gln Pro Arg Gly Cys Asp Gln Asp Leu Val Phe Leu		
1136	995	1000	1005
1137	Tyr Arg Leu Thr Glu Gly Ala Cys Pro Glu Ser Tyr Gly Leu Gln Val		
1138	1010	1015	1020
1139	Ala Leu Met Ala Gly Ile Pro Asn Gln Val Val Glu Thr Ala Ser Gly		
1140	1025	1030	1035
			1040

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/529,239B

DATE: 10/21/2002
TIME: 18:20:24

Input Set : N:\Crf4\Refhold\I529239B.raw
Output Set: N:\CRF4\10212002\I529239B.raw

1141 Ala Ala Gln Ala Met Lys Arg Ser Ile Gly Glu Asn Phe Lys Ser Ser
1142 1045 1050 1055
1143 Glu Leu Arg Ser Glu Phe Ser Ser Leu His Glu Asp Trp Leu Lys Ser
1144 1060 1065 1070
1145 Leu Val Gly Ile Ser Arg Val Ala His Asn Asn Ala Pro Ile Gly Glu
1146 1075 1080 1085
1147 Asp Asp Tyr Asp Thr Leu Phe Cys Leu Trp His Glu Ile Lys Ser Ser
1148 1090 1095 1100
1149 Tyr Cys Val Pro Lys
1150 1105

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 10/21/2002
PATENT APPLICATION: US/09/529,239B TIME: 18:20:25

Input Set : N:\Crf4\Refhold\I529239B.raw
Output Set: N:\CRF4\10212002\I529239B.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 30
Seq#:2; Line(s) 53
Seq#:3; Line(s) 68
Seq#:4; Line(s) 78
Seq#:5; Line(s) 88
Seq#:6; Line(s) 98
Seq#:7; Line(s) 108
Seq#:8; Line(s) 118
Seq#:9; Line(s) 128
Seq#:10; Line(s) 138
Seq#:11; Line(s) 148
Seq#:12; Line(s) 175,176,177,178
Seq#:13; Line(s) 186
Seq#:14; Line(s) 196
Seq#:15; Line(s) 223,224,225,226,227,228,229,230,231,232,233,234,235,236
Seq#:15; Line(s) 237,238,239,240,241
Seq#:16; Line(s) 249
Seq#:17; Line(s) 259
Seq#:18; Line(s) 271,479,480
Seq#:20; Line(s) 631
Seq#:21; Line(s) 641
Seq#:22; Line(s) 650
Seq#:23; Line(s) 660
Seq#:24; Line(s) 670
Seq#:25; Line(s) 680
Seq#:26; Line(s) 707,708,709,710,711,712,713,714,715,716,717,718,719,720
Seq#:26; Line(s) 721,722,723,724,725,726,727
Seq#:27; Line(s) 751,752,753,754,755,756,757
Seq#:28; Line(s) 765
Seq#:29; Line(s) 775
Seq#:30; Line(s) 787,1001,1002
Seq#:32; Line(s) 1157
Seq#:33; Line(s) 1166
Seq#:34; Line(s) 1175
Seq#:35; Line(s) 1185
Seq#:36; Line(s) 1195
Seq#:37; Line(s) 1205
Seq#:38; Line(s) 1215
Seq#:39; Line(s) 1225
Seq#:40; Line(s) 1235
Seq#:41; Line(s) 1245
Seq#:42; Line(s) 1255
Seq#:43; Line(s) 1265

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/529,239B

DATE: 10/21/2002
TIME: 18:20:25

Input Set : N:\Crf4\Refholt\I529239B.raw
Output Set: N:\CRF4\10212002\I529239B.raw

Seq#:44; Line(s) 1275
Seq#:45; Line(s) 1285
Seq#:46; Line(s) 1295
Seq#:47; Line(s) 1305
Seq#:48; Line(s) 1315
Seq#:49; Line(s) 1325
Seq#:50; Line(s) 1335
Seq#:51; Line(s) 1345
Seq#:52; Line(s) 1355
Seq#:53; Line(s) 1365
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Seq#:58; Line(s) 1415
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Seq#:62; Line(s) 1455
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Seq#:67; Line(s) 1505
Seq#:68; Line(s) 1515
Seq#:69; Line(s) 1525
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Seq#:71; Line(s) 1545
Seq#:72; Line(s) 1555
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Seq#:74; Line(s) 1575
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Seq#:76; Line(s) 1595
Seq#:77; Line(s) 1605
Seq#:78; Line(s) 1615
Seq#:79; Line(s) 1625
Seq#:80; Line(s) 1635
Seq#:81; Line(s) 1645
Seq#:82; Line(s) 1655
Seq#:83; Line(s) 1665
Seq#:84; Line(s) 1675
Seq#:85; Line(s) 1685
Seq#:86; Line(s) 1695
Seq#:87; Line(s) 1705
Seq#:88; Line(s) 1715
Seq#:89; Line(s) 1725
Seq#:90; Line(s) 1735
Seq#:91; Line(s) 1745
Seq#:92; Line(s) 1755

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 10/21/2002
PATENT APPLICATION: US/09/529,239B TIME: 18:20:25

Input Set : N:\Crf4\Refhold\I529239B.raw
Output Set: N:\CRF4\10212002\I529239B.raw

Seq#:93; Line(s) 1765
Seq#:94; Line(s) 1775
Seq#:95; Line(s) 1785
Seq#:96; Line(s) 1795
Seq#:97; Line(s) 1805
Seq#:98; Line(s) 1833,1834,1835,1836,1837,1838,1839,1840,1841,1842,1843
Seq#:98; Line(s) 1844,1845,1846,1847,1848,1849,1850,1851,1852,1853,1854
Seq#:98; Line(s) 1855,1856,1857,1858,1859,1860,1861,1862,1863,1864,1865
Seq#:98; Line(s) 1866,1867,1868,1869,1870,1871,1872,1873,1874,1875,1876
Seq#:98; Line(s) 1877,1878,1879,1880,1881,1882,1883,1884,1885,1886,1887
Seq#:98; Line(s) 1888,1889,1890,1891,1892,1893,1894,1895,1896,1897,1898
Seq#:98; Line(s) 1899,1900,1901,1902,1903,1904,1905,1906,1907,1908,1909
Seq#:98; Line(s) 1910,1911,1912,1913,1914,1915,1916,1917,1918,1919,1920
Seq#:98; Line(s) 1921,1922,1923,1924,1925,1926,1927,1928,1929,1930,1931
Seq#:98; Line(s) 1932,1933,1934,1935,1936,1937,1938,1939,1940,1941,1942
Seq#:98; Line(s) 1943,1944,1945,1946,1947,1948,1949,1950

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/529,239B

DATE: 10/21/2002
TIME: 18:20:25

Input Set : N:\Crf4\Refhold\I529239B.raw
Output Set: N:\CRF4\10212002\I529239B.raw

L:7 M:270 C: Current Application Number differs, Wrong Format
L:38 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:61 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:158 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:12
L:206 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:15
L:488 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:19
L:690 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:26
L:734 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:27
L:1010 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:31